

Distance and Time Calculator

Version 1.3

USER MANUAL



© July 2011

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Privacy policy

Softwares developed by OptiXL do not collect any information on the computer or on its use. Any information provided to us during registration, if required, is for the sole purpose of keeping statistics on our software use and will not be sold.

Support

The software activated with a registered PRODUCT KEY receives full support and are eligible for product updates for their product version (1.*). Any inquiries for modifications or bug fixes are to be submitted through the support page at <http://www.optixl.com/support.php> and will be reviewed in priority.

The TRIAL VERSION is provided with no support other than what is available in the documentation provided with it or on the website (<http://www.optixl.com>).

Updates will be releases on the website has they become available.

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Introduction

Distance and Time Calculator (DistTimeCalc.dll) is an Add-in for Microsoft MapPoint. This add-in automates the calculation of driving distance and time between many locations. You can calculate quickly the distance between your customers and warehouses or between sales points.

The Add-in will rapidly create a compatible Microsoft Excel workbook or Access Database from pushpin sets for in a few clicks. The results are exported in an easy to read matrix format. The workbook will contain worksheets for the distances, the driving time, the trip time and or cost.

This manual will guide you in installing the software and how-to use it.

New features

Version 1.3 has been improved in many ways. The following features have been added:

- Two new export formats: HTML and Comma-Separated values (csv),
- Check for update: Now you can check for newer version (For registered copy),
- .Net Framework 4.0: Benefits of latest MS Windows features,
- Many bugs have been fixed for improved stability.

Minimum requirements

The minimum requirements for using the add-in are:

- Windows operating system (XP, Vista and 7)
- Microsoft .NET Framework 4.0
- Microsoft MapPoint 2004 or newer

Optionally in order to open the output file, you need an application compatible with one of these file formats:

- Microsoft Excel 97-2003 or 2007
- Microsoft Access 2000

The more powerful your processor is, the faster you will be able to compute the distance and time for a given pushpin set. It will run on single processor systems easily. As an example, to compute distances and times between two 65 pushpin sets requires around 10 minutes on an AMD Athlon 2.2 GHz (Symmetrical route and Hide MapPoint options selected).

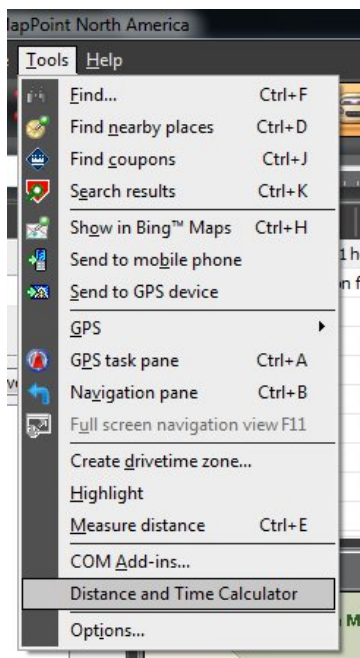
Install and removal

How to install

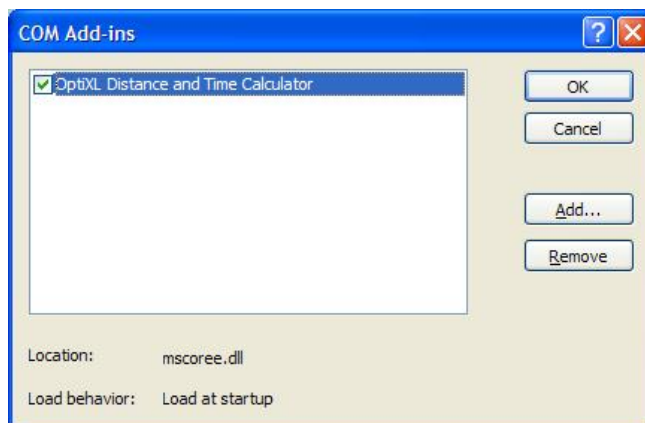
After downloading *DistTimeCalcSetup.msi*, you can launch the Microsoft installer by double clicking the file to install *DistTimeCalc* on your computer.



It will add to Microsoft MapPoint a new menu item called « *Distance and Time Calculator* »¹ in the Tools menu as shown here.



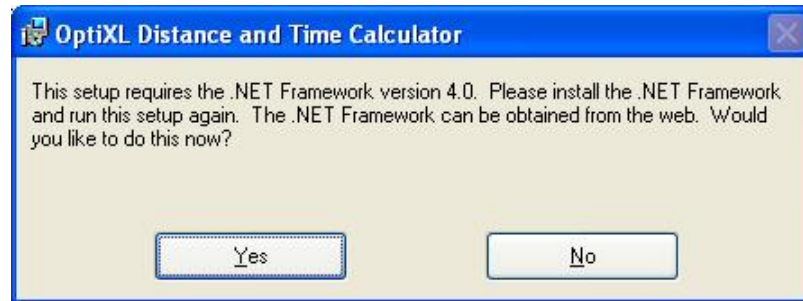
By default it will be started with MapPoint. If you do not see the new menu item, you can check in the Tools menu « *COM Add-ins...* » and make sure it appears in the list and that it is checked like below.



¹ Before version 1.2, the application was named « Get driving distance and time between a Pushpin set... » in the Tools menu.

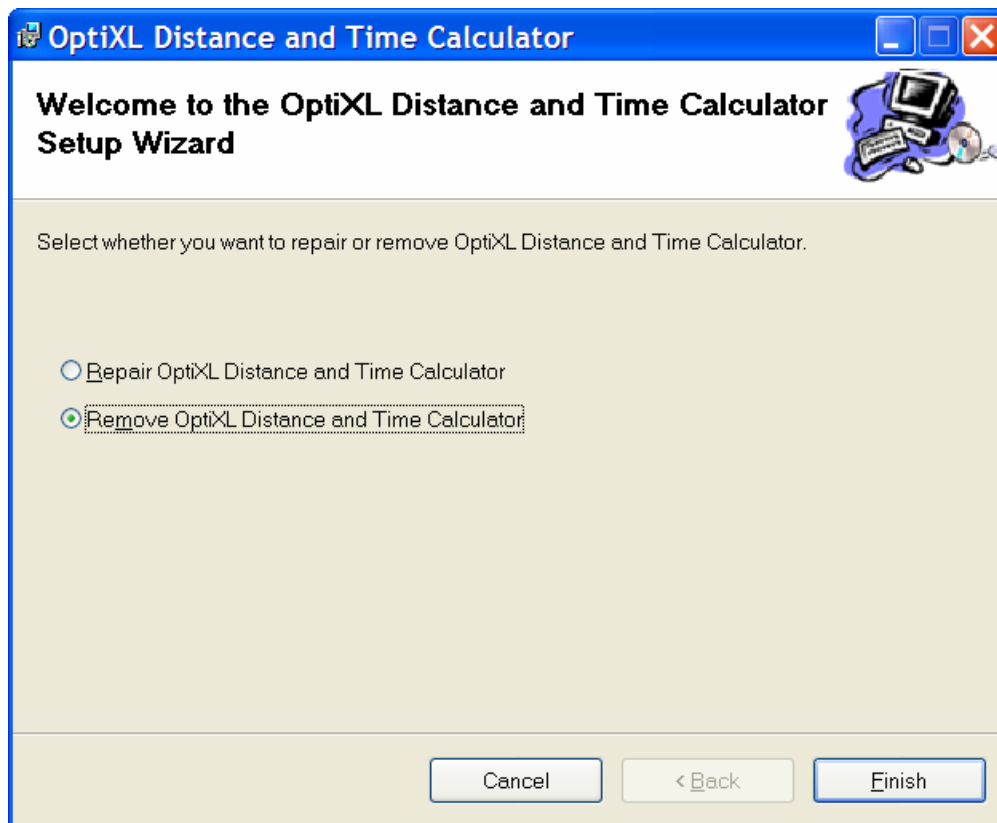
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If .Net Framework version 4.0 is not installed on your computer, the message below will be displayed and you will be asked to install it. Then, you will be able to install this Add-in.



How to remove

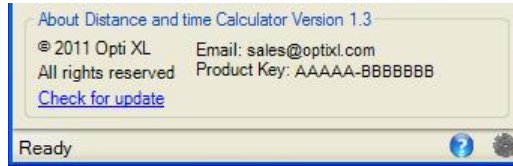
Distance and Time Calculator can be removed by starting the Add/Remove programs in the Control Panel or by selecting « *Remove OptiXL Distance and Time Calculator* » if running *DistTimeCalcSetup.msi*. This will delete completely the software but not your results.



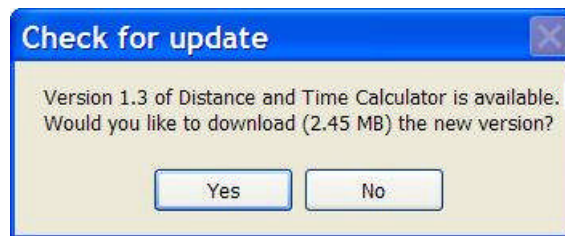
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Check for update

Users that have activated the product will be able to verify from Distance and Time Calculator if a newer version of the product is available to download by clicking the link « Check for update » in the bottom section as shown below.



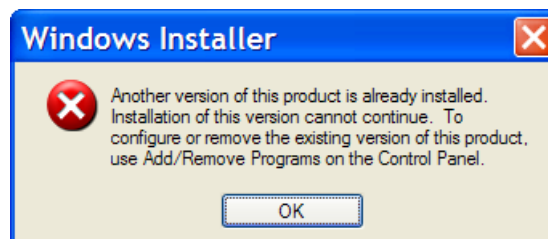
You will be asked if you want to download the newer version. By clicking « Yes », the download will start in your web browser.



If no update is found, you will receive this message:



While trying to update to a newer version, you may receive an error message from the Windows Installer like the one below. Therefore, you will have to manually remove the program by using the Add/Remove programs from the Control Panel before installing the new version.



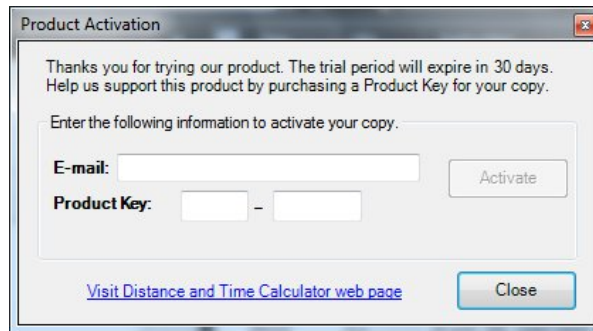
Activate your product

Buying a product key

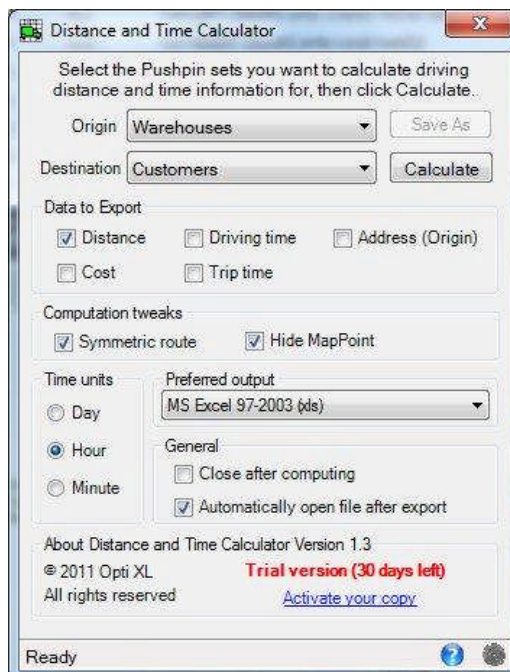
You can buy a Product Key online at <http://www.optixl.com/products/disttimecalc.php>. The link at the bottom of the message will open your web browser to the proper page. Once the purchase process is completed, you will receive your Product Key by e-mail.

Entering the product key

The Trial version can be used for a period of 30 days and is a fully functional version of the product so you can try it before buying a copy. After the first use of the product, you will be asked to activate your product. At start, the following message will appear. To continue using the trial version, just click on the close button.

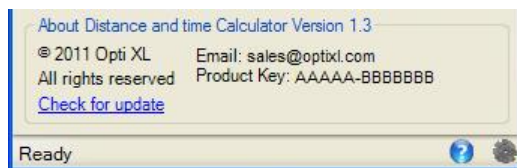


The link « Activate your copy » will open the Product Activation form. The number of days remaining for the Trial version will appear in the « About » section.



OptiXL – Distance and Time Calculator

Enter your e-mail and product key to register the product. Once registered, your e-mail and product key will appear in the « About » section like below.



How to Use

Quick overview

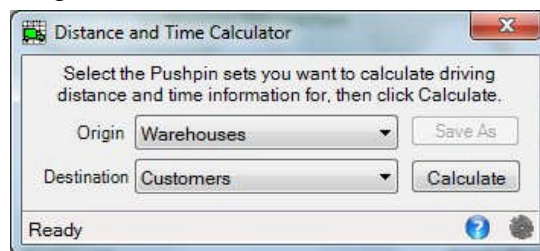
Follow these three steps to calculate the driving distances and times for the pushpin set after opening a Map file (ptm) in MapPoint.

1. Go to Tools and click on « *Distance and Time Calculator* »¹
2. Select the pushpin sets (Origin and Destination).
3. Click « *Calculate* ».

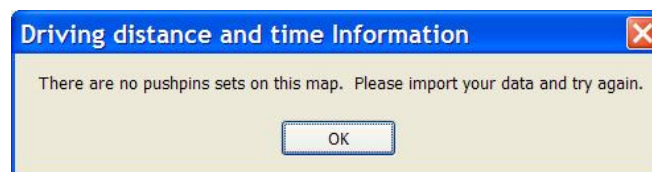
At the end, you will have a file with the driving distances and times for the pushpin set.

Step-by-step instructions

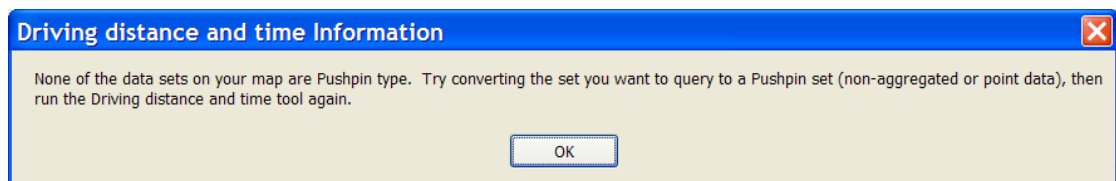
Once you have started MapPoint and opened a MapPoint Map, you can run the Add-in by going in the Tools menu and click on « *Distance and Time Calculator* »¹. This will open the following window:



It will list the Pushpin sets available in your current file for Origins (From) and Destinations (To). If no data set is found, it will simply end by giving the message below. This means that there is no data on the selected map.



Also, if the data sets on the map are not of pushpin type, the following message will be displayed. You will have to convert a data set to a pushpin set first.

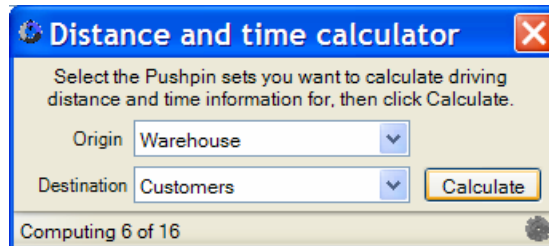


¹ Before version 1.2, the application was named « Get driving distance and time between a Pushpin set... » in the Tools menu.

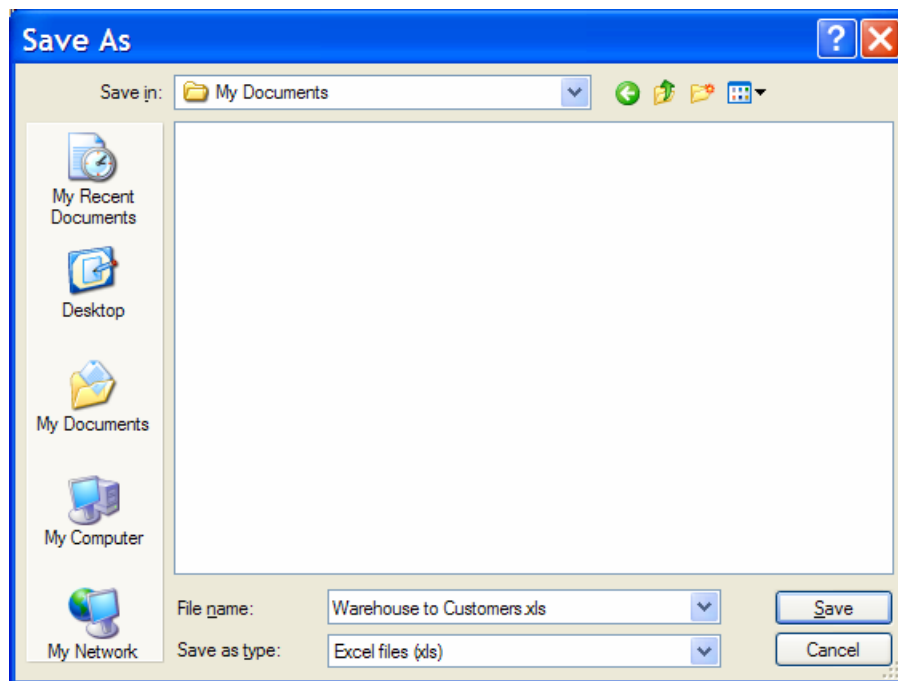
OptiXL – Distance and Time Calculator

By default the « Origin » will be set to the first pushpin set and the « Destination » will be set to the second pushpin set or the first if only one pushpin set exist in the map.

Next after selecting a Pushpin set for « Origin » and « Destination » you press the « Calculate » button to start the computation of the driving distance and time information and. The bar at the bottom of the window will inform you of the progress.

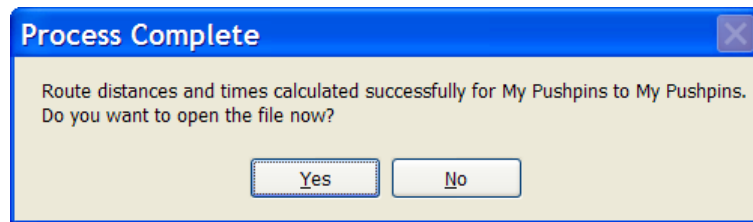


At the end, you will be asked to save the file. By default, the name of the Pushpin sets will be suggested and the save location will be your default folder (My Documents).

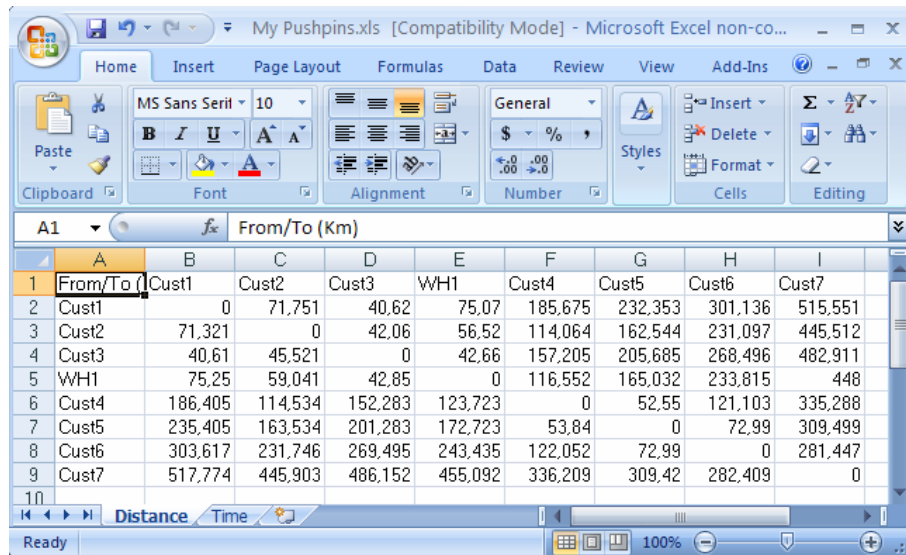


This will produce a Microsoft Excel workbook (or Microsoft Access database) containing a worksheet (table) for every data to export selected. At the end you will be asked if you want to open the file. By clicking « Yes », the output file will be opened by the registered application. You will also be able to save the file again or to other formats.

OptiXL – Distance and Time Calculator



The output for a Microsoft Excel file will look something like this.

A screenshot of a Microsoft Excel spreadsheet titled "My Pushpins.xls [Compatibility Mode] - Microsoft Excel non-co...". The spreadsheet shows a table of distances and times between various locations. The columns are labeled A through I, and the rows are numbered 1 through 9. The first row (row 1) is the header, and the subsequent rows (rows 2-9) contain data for different locations. The unit of measurement is indicated as "From/To (Km)" in the formula bar.

	A	B	C	D	E	F	G	H	I
1	From/To (Km)	Cust1	Cust2	Cust3	WH1	Cust4	Cust5	Cust6	Cust7
2	Cust1	0	71,751	40,62	75,07	185,675	232,353	301,136	515,551
3	Cust2	71,321	0	42,06	56,52	114,064	162,544	231,097	445,512
4	Cust3	40,61	45,521	0	42,66	157,205	205,685	268,496	482,911
5	WH1	75,25	59,041	42,85	0	116,552	165,032	233,815	448
6	Cust4	186,405	114,534	152,283	123,723	0	52,55	121,103	335,288
7	Cust5	235,405	163,534	201,283	172,723	53,84	0	72,99	309,499
8	Cust6	303,617	231,746	269,495	243,435	122,052	72,99	0	281,447
9	Cust7	517,774	445,903	486,152	455,092	336,209	309,42	282,409	0

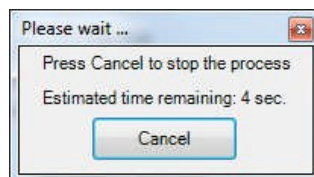
The unit of measure for the distance can be kilometers or miles depending on what is selected in your options (Tools -> Options...). The unit is indicated next to « From/To » as (Km or Miles) in the file.

Saving to another format

At the end of computation, the button « Save As » will be enabled to let you save again the file to one of the other supported formats without the need to recalculate everything.

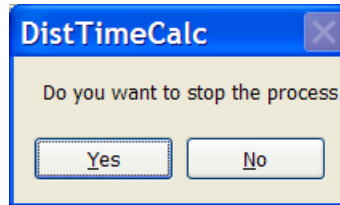
Stopping the computation

During the computation, press the cancel button on the « Please wait ... » window to stop the process. This window will disappear when there is about 2 seconds left in the computation.



OptiXL – Distance and Time Calculator

A confirmation message will appear like this one. If you choose « Yes », then the computation will stop when all destinations of the current origin are calculated.



Duplicate values

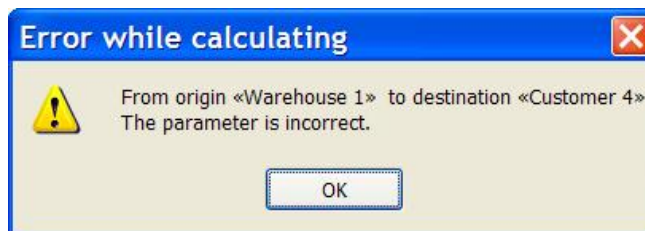
If a duplicate name for a pushpin is found during the computation, the second column will have its name appended with a dash (-) followed by a number representing the column number. This is required to assure a unique name for each column but the name in the row will not be changed.

Unmatched pushpins

If a pushpin set contains unmatched pushpins, they will be ignored during the computation. In the output file, they will appear empty (line, column or both).

Error while calculating

If an error occurs during the computation, an error message titled « Error while calculating » will be displayed. The origin-destination pair that is causing a problem will appear along with a description of the problem. This type of error will cause the computation to stop. Still, you will be prompted to save to a file the computations done so far. By opening the output file, you will be able to determine which pushpin is causing the problem. You will need to correct your MapPoint file (ptm) and then restart the computation.

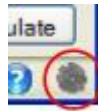


Configuration options

The configuration options are saved so that you don't have to set them each time and they will be the same for all MapPoint files unless you change them. The following options can be configured.

- Data to export
- Computation tweaks
- Time units
- Preferred output
- General

The configuration options can be viewed or hidden by clicking on the gear image at the bottom right of the screen (red circle below).



Data to export

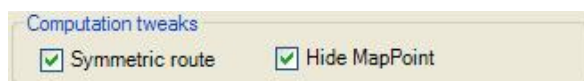
You can export the « *Distance* » (Default), the « *Cost* », the « *Driving time* » and the « *Trip time* » to your workbook. Additionally, the « *Address (origin)* » can be added to Distance worksheet.



Computation tweaks

This section contains two performance tweaks in order to reduce the computation time.

- « *Symmetric route* » will calculate the routes as a triangular matrix. This feature is only available when computing between the same Pushpin set (Origin and Destination). This will reduce the processing time by half.
- « *Hide MapPoint* » during computation. This option slightly reduces the processing time because Windows does not have to redraw the routes each time. This option should be selected when computing large Pushpin sets. (New in version 1.2)



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Time units

The time units used to compute driving and trip times can be in « *Day* », « *Hour* » (Default) or « *Minute* ».



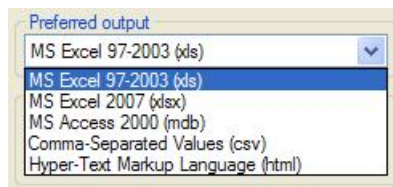
Preferred Output

This option remembers your preferred file format to save the result. The format can be one of these:

- MS Access 2000 (.mdb)
- MS Excel 97-2003 (.xls)
- MS Excel 2007 (.xlsx)
- Comma-Separated Values (csv)
- Hyper-Text Markup Language (html)

A file will be created for every tables (data to export) when saving the result in Hyper-Text Markup Language or Comma-Separated Values format. The name of the table will be appended at the end of the filename (e.g. Warehouses to Customers-Distance.csv).

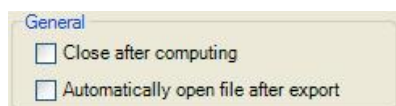
Saving the result with more than 256 columns is not possible in MS Excel 97-2003 or MS Access 2000 due to column limitation. If ever the limit is exceeded, those two formats will not be available to save the file.



General

This section contains two options to improve the behavior of the software.

- « *Close after computing* » will automatically close the software after the process is finished when checked (Default).
- « *Automatically open file after export* » will open the workbook after it has been saved when checked.



Known issues

Version 1.3 of Distance and Time Calculator is stable and has been tested on different computers, versions of Microsoft MapPoint and Windows operating systems.

There are no known issues.

Bugs fixed

The following bugs have been fixed in Distance and Time Calculator version 1.3:

- Error when exporting to MS Excel 2007 more than 256 columns,
- Resize issue,
- Better handling of duplicate values and unmatched pushpins.